EMTP - EMT PARAMEDIC

EMTP 100 Introduction and Patient Assessment
This course is designed to provide the student with the necessary knowledge of the roles and responsibilities of advanced life support systems and procedures. Topics such as medical/legal ethics and drug information will be presented. Experiments and case studies will be presented. It will also provide the student with theory, concepts and the applications necessary to measure the pre-hospital scene and its surroundings. Additionally, the student will be able to prioritize care based on patient assessment, which includes body substance isolation, scene safety, recognition and stabilization of life-threatening conditions, identification of patients who require rapid stabilization and transportation for definitive care. NOTE Requirements:: Current Pennsylvania Emergency Medical Technician certification. Students currently certified (without restrictions or administrative actions) by National Registry Emergency Medical Technician must also obtain a Pennsylvania EMT certification; Current Cardio Pulmonary Resuscitation certification issued by an approved third party accreditation body as identified by the PA Bureau of Emergency Medical Services; Successful completion of physical examination (including drug screening) performed by the students physician using the physical form provided by DCCC; Clear Pennsylvania State Police criminal background check as mandated by PA Bureau of EMS; Clear child abuse clearance as mandated by the PA Bureau of EMS; Clear FBI background clearance including fingerprinting; Clear criminal background from state of residence. Provide verifiable documentation in the form of a letter from a chief officer from an EMS organization of 25 patient contacts as primary patient care leader where the candidate made the overall medical decisions for patient treatment and transport destination. This document must be submitted with the admissions packet no later than the second week of February in the year the student is applying.
Upon successful completion of this course, students should be able to:
Define the roles and responsibilities of the paramedic in the Emergency Medical Service (EMS) systems as they relate to history, system development, education, research and continuous quality improvement.
Describe the individual's role in providing emergency patient care.
Outline the individual's role in promoting community health education, wellness and prevention.
Identify professional, ethical, legal and moral accountability issues and situations.
Identify the components of patient assessment and examination.
Identify life-threatening conditions.
Outline effective patient communication techniques.
Apply interventions as identified during patient assessment.
Identify priorities of management of the medical and traumatic patient.
Effectively provide current and on-going patient care.
Recognize changes in assessment and apply appropriate interventions as indicated.
Identify communication strategies necessary to collect information, interview and assess patients.
Prerequisites: ((ENG 050 and REA 050) or ENG 099 or REA 075) and (MAT 060 or MAT 050). Appropriate placement test scores may be accepted.
6 Credits 3 Weekly Lecture Hours

EMTP 101 Pharmacology and Airway Management
This course is designed to stress practices applicable to the paramedic practitioner. Emphasis is placed on medication application, pharmacology and therapeutic concepts and practices. Various approaches are covered to ensure that the student receives broad exposure to all areas required for the paramedic practitioner. Experiments and case studies will be presented during this course. The student will utilize the knowledge of anatomy and physiology of the respiratory system to examine the mechanics of respiration, gases, regulation of respiration, foreign body airway obstructions and airway evaluation. In addition, the student will study the essential parameters of airway evaluation, airway management, and airway procedures. NOTE Requirement: Certification as a current Emergency Medical Technician and current CPR provider; Pre-requisites must be completed with grade of 'C' or better.
Upon successful completion of this course, students should be able to:
Identify the components of human anatomy and physiology as they relate to care for the sick or injured.
Identify the proper use and administration of drugs for various body systems.

Explain pharmacological characteristics, mathematical principles, and purpose in administering pharmacological agents.
Identify communication strategies necessary to collect information, interview and assess patients.
Discuss the assessment and management of the respiratory system.
Identify the anatomy and physiology of the respiratory systems.
Describe variations in assessment and management of the respiratory system.
Outline the mechanics of the respiratory system.
Describe the regulation of the respiratory system.
Describe devices and techniques in the management of the respiratory patient.
Describe conditions and complications associated with the respiratory system.
Utilize pharmacological agents in management of the respiratory system.
Utilize manual and mechanical interventions in management of the respiratory system.
Distinguish between respiration, pulmonary ventilation, and external and internal respiration.
Describe pulmonary circulation.
Describe voluntary, chemical and nervous regulation of respiration.
Outline essential parameters to evaluate the effectiveness of airway and breathing.
Describe the indications, contraindications, and techniques for supplemental oxygen delivery.
Discuss methods for patient ventilation.
Describe the assessment techniques and devices used to ensure adequate oxygenation.
Prerequisites: EMTP 100.
6 Credits 3 Weekly Lecture Hours
6 Weekly Lab Hours

EMTP 102 Trauma Assessment and Management
This course is designed to provide the student with the knowledge and skills to recognize the mechanisms of injury, trauma systems, patient assessment and emergency care. The course will also cover, in detail, the importance of length of time that elapses between the incident and definitive care. Additionally, the course addresses the major roles in death reduction in three periods of trauma: through community education, scene interventions, and rapid response. Trauma systems, appreciation of comprehensive trauma systems, blunt trauma, and penetrating trauma will be thoroughly discussed. NOTE Requirement: Certification as a current Emergency Medical Technician and current CPR provider; Pre-requisites must be completed with grade of 'C' or better.
Upon successful completion of this course, students should be able to:
Describe the incidence and scope of traumatic injuries and deaths.
Identify the role of each component of the trauma system.
Predict injury patterns based upon knowledge of the laws of physics related to forces involved in trauma.
Describe the injury patterns that should be suspected when injury occurs from blunt trauma.
Describe the role of restraints in injury prevention and the injury patterns.
Discuss how an organ's motion may contribute to injury in each body region depending on the forces applied.
Identify selected injury patterns associated with motorcycle and all-terrain vehicle (ATV) collisions.
Describe injury patterns associated with pedestrian collisions.
Identify injury patterns associated with sports injuries, blast injuries and vertical falls.
Describe factors that influence tissue damage related to penetrating injuries.
Attain certification in Pre-Hospital Trauma Life Support.
Prerequisites: EMTP 101.
5 Credits 3 Weekly Lecture Hours
4 Weekly Lab Hours

EMTP 103 Cardiology
This course is designed to prepare the paramedic student to manage numerous types of cardiology emergencies. Topics including the etiology and epidemiology of cardiopulmonary diseases and conditions will be discussed as well as the means of identifying and describing the function of cardiopulmonary system. NOTE Requirement: Certification as a current Emergency Medical Technician and CPR provider; Pre-requisites must be completed with grade of 'C' or better.
Upon successful completion of this course, students should be able to:
Identify the risk factors and prevention education of cardiovascular disease processes.
Distinguish pathophysiology of respiratory emergencies related to ventilation, diffusion, and perfusion.
Assess causes, complications, and conditions of the cardiopulmonary system.
Describe the anatomy and physiology of the cardiopulmonary system.
Identify the electrophysiology of the cardiac system.
Describe cardiovascular disease processes.
Distinguish among varied techniques in managing cardiac and pulmonary emergencies.
Apply emergency intervention on patients suffering from cardiopulmonary conditions.
Attain certification in Advance Cardiac Life Support.
Prerequisites: EMTP 101.
Corequisites: EMTP 102 and EMTP 104 and EMTP 105.
4 Credits 3 Weekly Lecture Hours
2 Weekly Lab Hours

EMTP 104 Medical Assessment and Management
This course is designed to prepare the paramedic student to manage numerous types of medical emergencies. This course will provide the student with information necessary to effectively perform in medical emergency situations pertaining to neurology, hematology, endocrinology, allergy, anaphylaxis, gastroenterology, urology and toxicology. NOTE Requirements: Certification as a current Emergency Medical Technician and CPR provider; Pre-requisites must be completed with grade of 'C' or better.
Upon successful completion of this course, students should be able to:
Describe anatomy and physiology of the nervous system.
Identify disorders of the nervous, endocrine, and gastro-urinary systems.
Identify neurological disorders.
Describe causative agents and the pathophysiology of ingested poisons.
Assess acute abdominal pain.
Specify disorders of the endocrine system.
Describe the anatomy and physiology of the endocrine glands that assist the body in the maintenance of homeostasis.
Describe the antigen antibody response.
Describe signs and symptoms and management of allergic reactions.
Describe signs and symptoms, complications, and pre-hospital management of gastrointestinal disorders.
Distinguish between poisoning by ingestion, inhalation, and injection.
Recognize conditions relating to drug and alcohol abuse.
Identify key structures and normal functions of the urinary system.
Describe detailed pathophysiology and assessment of urinary system disorders.
Identify abdominal and genitourinary disorders, acute abdominal pain and systemic illnesses.
Apply management and treatment priorities for toxic syndromes.
Discuss the pathophysiology of blood and hematological disorders.
Apply the theory of thermoregulation to various patient presentations.
Prerequisites: EMTP 101.
Corequisites: EMTP 102 and EMTP 103 and EMTP 105.
3 Credits 2 Weekly Lecture Hours
2 Weekly Lab Hours

EMTP 105 Clinical Rotations I
This course is an incorporation of the skills and practices that each student will need to accomplish during the in hospital clinical sessions. The clinical document required by the Committee on Accreditation of Educational Programs for Emergency Medical Services Professions (CoAEMSP) outlines the specific encounters with the patient that each student must successfully achieve during clinical and hospital sessions. In addition, topics such as intravenous medications bolus through intravenous line, communicating, relaying patient information, and trauma including hospital procedures will be covered. NOTE: Pre-requisites must be completed with grade of 'C' or better.
Upon successful completion of this course, students should be able to:
Perform a comprehensive identification, assessment and management of a variety of advanced life support patients in the in-hospital setting.
Demonstrate knowledge of communication systems for reporting patient care and interventions.
Demonstrate appropriate patient communication techniques.
Document all patient assessments and advanced life support interventions accurately for patients in a variety of in-patient and out-patient clinical settings.
Demonstrate appropriate assessment, communications and management for pediatric patients.
Demonstrate appropriate assessment, communications and management for psychiatric patients.
Demonstrate appropriate assessment, communications and management for trauma patients.
Demonstrate appropriate assessment, communications and management for intensive care unit and intermediate care patients.
Prerequisites: EMTP 101.
Corequisites: EMTP 102 and EMTP 103 and EMTP 104.
2 Credits
4 Weekly Lab Hours

EMTP 200 Summative Field Clinical
Summative Field Clinical is a Capstone course. Students will enroll in this course only after demonstrating skill and knowledge in the didactic and laboratory components of the program. Students will perform and manage an effective assessment of the patient. The student will learn the appropriate procedures to gather evaluate and synthesize information as well as make appropriate decisions based on that information and be able to take the necessary action for patient care. The student will be expected to achieve proficiency by performing these skills on actual patients in a clinical setting. Integrating pathophysiological principles, physical examination findings, formulating a field impression and implementing treatment for the patient with common complaints will be practiced during this time. Alternative learning experiences (simulations, programmed patient scenarios, etc.) will be available as needed. Proficiency in performing all steps and procedures safely and properly will be thoroughly evaluated. NOTE Requirement: Certification as a current Emergency Medical Technician and CPR provider; Pre-requisites must be completed with grade of 'C' or better.
Upon successful completion of this course, students should be able to:
Demonstrate and discuss how assessment-based management contributes to effective patient and scene assessment.
Demonstrate and describe factors that affect assessment and decision making in the pre-hospital setting.
Demonstrate the proper application and performance of basic life support skills.
Demonstrate safe practices in the pre-hospital environment.
Recognize the need of advanced life support interventions.
Outline effective techniques for scene and patient assessment and choreography of patient assessment and personnel management.
Identify and utilize essential take-in equipment for general and selected patient situations.
Outline strategies that promote an effective patient encounter.
Describe techniques that permit efficient and accurate presentation of the patient.
Demonstrate the ability to serve as a team leader in a variety of pre-hospital emergency responses.
Demonstrate proper performance of advanced life support procedures and skills.
Apply the appropriate advanced life support skills in an emergency situation.
College Academic Learning Goal Designation: Information Technology (TC)
Prerequisites: EMTP 102 and EMTP 103 and EMTP 104 and EMTP 105.
Corequisites: EMTP 201 and EMTP 205.
8 Credits 0 Weekly Lecture Hours
16 Weekly Lab Hours

EMTP 201 Operations and Special Patient Populations
This course is designed to provide the student with information necessary to effectively perform in specific medical emergency situations. Infectious diseases, disease transmission pathways, behavioral and psychiatric illnesses, obstetrical and gynecological emergencies and rescue operations will be covered. NOTE Requirement: Certification as a current Emergency Medical Technician and CPR provider; Pre-requisites must be completed with grade of 'C' or better.
Upon successful completion of this course, students should be able to:
Distinguish among the recognition, transmission, and pathophysiology of infectious diseases.
Discuss the paramedic's role in the prevention of disease transmission.
Discuss the critical principles of behavior emergencies.
Identify potential causes of behavioral and psychiatric illnesses.
Distinguish varied methods of approaching violent and non-violent patients (adult or child).
Describe the physiology of menstruation and ovulation.
Describe the structure and function of processes during pregnancy.
Describe detailed assessment and management of obstetrical and gynecological emergencies.
Discussion and demonstration of rescue operations.
Attain certification in Pediatric Advanced Life Support.
Prerequisites: EMTP 102 and EMTP 103 and EMTP 104.
Corequisites: EMTP 200 and EMTP 205.
4 Credits 3 Weekly Lecture Hours
2 Weekly Lab Hours

EMTP 205 Clinical Rotations II
This course addresses skills and practices each student needs to successfully complete during the in-hospital clinical sessions. The clinical document required by the Committee on Accreditation of Educational Programs for Emergency Medical Services Professions (CoAEMSP) outlines the specific encounters with the patient that each student must successfully achieve during clinical and hospital sessions. In addition, topics such as intravenous medication bolus through intravenous line, communicating, relaying patient information, and trauma will be experienced, as well as numerous in hospital miscellaneous procedures. NOTE: Pre-requisites must be completed with grade of 'C' or better.
Upon successful completion of this course, students should be able to:
Perform a comprehensive identification, assessment and management of a variety of advanced life support patients in the in-hospital.
Demonstrate knowledge of communication systems for reporting patient care and interventions.
Demonstrate appropriate patient communication techniques.
Document all patient assessments and advanced life support interventions accurately for patients in a variety of in-patient and out-patient clinical settings.
Demonstrate appropriate assessment, communications and management for pediatric patients.
Demonstrate appropriate assessment, communications and management for maternity patients.
Demonstrate appropriate assessment, communications and management for labor and delivery patients.
Demonstrate appropriate assessment, communications and management for burn patients.
Prerequisites: EMTP 102 and EMTP 103 and EMTP 104 and EMTP 105.
Corequisites: EMTP 200 and EMTP 201.
2 Credits 0 Weekly Lecture Hours
4 Weekly Lab Hours